U.S. Navy
**Air ENCON Program**

# Air Energy Conservation (Air ENCON) Program Overview

## Program Overview

Air Energy Conservation (Air ENCON) is a Naval Air Enterprise-wide program designed to optimize fuel consumption by naval aviation units to ensure the right amount of fuel is available for sustained mission readiness.

The Navy Energy Vision set a goal of reducing energy use afloat by 15% by 2020. As part of this, the Air ENCON program seeks to achieve a 4% reduction in non-mission fuel burn in aviation by 2020. In doing so, Air ENCON will help to:

- Reduce the Navy's reliance on petroleum
- Promote a culture of energy awareness
- Identify and communicate best practices
- Eliminate inefficient policy/cultural paradigms
- Reward innovation and most efficient utilization of energy resources

***Without*** adversely impacting mission execution or safety

## Air Energy Conservation Best Practices

A number of individual aviation units, working with the AWG or through their own initiative, have already developed a number of cost and fuel-saving initiatives:

- Replacing "hot pit" refueling with fuel trucks at NAS Lemoore, resulting in 2 million gallons of fuel saved per year
- Adopting Short-Cycle Mission and Recovery Tanking (SMART tanking) in Carrier Air Wings 5 & 7, resulting in a 65% reduction in tanker fuel burn
- Achieving Reverse Vertical Minimum Separation (RVSM) certification for the F-18 allows F-18s to fly above 29,000 feet during cross-country flights, saving approximately $250k per squadron per year in fuel costs.

## Background

The Navy Air ENCON program grew out of the CNO's recognition of the critical role energy plays in the Navy's war-fighting capability. Specifically:

- The US Navy currently uses 30% of all energy across DoD
- For every $1 rise in the price of fuel, the Navy pays an extra $31 million annually
- DON currently accounts for 34% of all DoD petroleum use – Aviation represents 40% of this total

Understanding that the high energy demands of individual Navy systems create constraints at the operation and tactical level, the US Navy has taken steps to decrease its reliance on traditional fuels.

In October 2010, the CNO signed the **Navy Energy Vision**, setting the goal to be a Navy that:

- Values energy as a strategic resource
- Understands how energy security is vital to executing the Navy's mission
- Is resilient to any future energy challenge

The CNO established **Task Force Energy** to drive the design and implementation of energy-saving initiatives across the US Navy.

Air ENCON is led by CNAP N40, with active participation from CNAL N40, CNAFR N3, CNAF N8, N41, N43, NAVAIR 4.4, OPNAV N45, and N88 Liaison.

## Why Energy Matters to Naval Aviation

Recognizing that increasing tactical energy security will require both a decrease in overall fuel consumption as well as increasing the fuel efficiency of existing systems, Task Force Energy took steps to target the most fuel-intensive portion of naval operations – aviation.

Naval Aviation operates more than 3,700 aircraft, burning more than 600 million gallons of fuel per year. In order to preserve its operational capabilities, Naval Aviation must find ways to squeeze the maximum amount of capability from each drop of fuel. With such a large footprint, opportunities abound for making Naval Aviation a more fuel-efficient organization.

For example, between 2009 and 2011, F/A-18s jettisoned nearly 6 million gallons of jet fuel during carrier training and operations in order to meet landing weight restrictions – enough fuel to support over 5,000 readiness hours for an F/A-18 squadron.

Simple fixes, such as reducing fuel dumping, may combine with a number of currently-existing practices, such as SMART tanking, to help lead the way to a more energy-efficient Naval Aviation Enterprise.

## How You Can Help

Aircrew and maintenance personnel must actively take steps to reduce their own fuel use. As the Air ENCON program begins its roll-out, you should:

- Take note of areas where your squadron could easily conserve fuel, and discuss with your squadron leadership
- Accurately and regularly report your fuel use in SHARP following each sortie
- Be on the lookout for further communications with explicit instructions on fuel saving changes to existing policies and procedures
- Visit the Air ENCON website at **www.airencon.greenfleet.dodlive.gov** (placeholder) for more information about the program and conservation best practices

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